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IN THE APPLICATION

OF

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FOR A

PACKAGING SYSTEM

## PACKAGING SYSTEM

### BACKGROUND OF THE INVENTION

#### 1. FIELD OF THE INVENTION

5 The present invention relates to packaging for dental floss, and more particularly, individualized packets containing a pre-selected length of dental floss.

#### 2. DESCRIPTION OF THE RELATED ART

10 Dental floss has commonly been manufactured and distributed as a spool, housed in a plastic dispensing container. The user withdraws a length of thread from the container and then severs the length of thread from the spool. An individual who seeks to employ flossing as a hygienic dental practice, commonly carries such a container on her person so that it can be easily accessed throughout the day. However, although such containers may be  
15 relatively compact, they nonetheless present undesirable bulk in a person's pockets.

Some attempts have been made in the past to provide smaller packaging for dental floss and smaller lengths of dental floss in each package. When the amount of dental floss in each  
20 package is adequate only for a single use, the associated

packaging can also be smaller and more convenient to carry about one's person. Such packaging, however, has typically included small, flat packets, which must be torn in order to access the dental floss. Consequently, one is left not only with used  
5 dental floss after flossing, but also torn packet pieces. In some instances, such as when one is in a car, it becomes difficult to appropriately and discretely manage the dental floss and packaging remains. Consequently, a compact packaging device for dental floss which may be used not only for storing  
10 dental floss before use but also for retaining used dental floss until it can be properly discarded is desirable.

U.S. Patent No. 4,579,221, issued April 1, 1986 to A.P. Corella discloses a peripherally sealed package containing a bunched up portion of dental floss or other filament with the  
15 outer ends of the floss or filament being disposed within and secured by sealed ends of the package. A notch whose cut enables the package to be opened, uses a segment of the package as a handle to draw the filament untangled and unknotted from the package.

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U.S. Patent No. 4,712,572, issued December 15, 1987 to W.G. Hovel discloses a dental floss packet consisting of a first water resistant sheet of material, a length of dental floss having one end thereof secured to a portion of a left periphery  
5 of the material and having another end thereof secured to a portion of a right periphery thereof, a second water resistant sheet of material, a die stamped seal extending entirely along the periphery between the sheets of the material and enclosing the dental floss therewithin.

10 U.S. Patent No. 4,852,728, issued August 1, 1989 to J.R. Court discloses a disposable single use package comprised of a short length of dental floss integrated in a sanitary packet. The packet is formed by first and second members releasably attached to one another to form a sanitary interior compartment  
15 for accommodating the length of dental floss.

U.S. Patent No. 4,986,289, issued January 22, 1991 to C.E. McWhorter discloses a dental hygiene product in the form of a packet having a front panel and a back panel containing a pre-cut length of dental floss thread stored as a coil. The packet  
20 is severable into first and second packet portions, and opposite ends of the thread are affixed to respective packet portions

which, after being severed, form grip tabs to facilitate withdrawal and use of the floss thread.

Other patents relating to dental floss packaging include U.S. Patent No. 4,014,433, issued March 29, 1977 to R.J. Cerwin (package for moisture sensitive sutures and method for making same); U.S. Patent No. 4,211,330, issued July 8, 1980 to A.E. Strock (oral health and hygiene kit); U.S. Patent No. 4,836,227, issued June 6, 1989 to N. Charatan (oral hygiene device); U.S. Patent No. 5,024,324, issued June 18, 1991 to D. Whittaker (single use dental floss spindle and method); U.S. Patent No. 5,322,077, issued June 21, 1994 to A.P. Corella (dental hygiene apparatus); U.S. Patent No. 5,549,201, issued August 27, 1996 to L.S. Bruade (package for dental floss); U.S. Patent No. 5,794,776, issued August 18, 1998 to A.P. Corella (instrumentation, system, method, and package for packaging flaccid filaments); U.S. Patent No. 5,913,418, issued June 22, 1999 to P. Singh (packaged dental floss with manual pressure dispensing); U.S. Patent No. 6,102,051, issued August 15, 2000 to P.S. Neves (flossing kit); and International Patent No. WO 98/52492, published November 26, 1998.

None of the above inventions and patents, taken either singly or in combination, is seen to describe the instant

invention as claimed. Thus a packaging system solving the  
aforementioned problems is desired.

#### SUMMARY OF THE INVENTION

5 The packaging system includes a thin, flexible bag that is  
generally small in size, and a pre-cut portion of dental floss  
disposed within the bag. The bag has a front wall and a rear  
wall, sealed together at opposite longitudinal side seams and at  
a closed lower end. A mouth is formed by the front and rear  
walls, between the side seams. A slidable sealer is affixed to  
10 an upper end of the bag to facilitate repeatable opening and  
closing of the mouth. The upper end of the bag further includes  
an aperture defined therein to facilitate display of the  
packaging system on a wire dispenser.

The packaging system of the present invention is  
15 particularly adapted for individual sale, as the hole at the  
upper end of the bag allows for display of the packaging system  
on a wire dispenser. Because of its small size, the packaging  
system may also be readily carried in wallets, billfolds, and  
the like. Additionally, the packaging system may be used as a  
20 replacement for complimentary toothpicks provided at  
restaurants. Since the integrity of the bag is not destroyed  
once the dental floss is removed, the used dental floss may be

placed in the bag and sealed therein until the packaging system may be conveniently disposed.

Accordingly, it is a principal object of the invention to provide a packaging system wherein select lengths of dental floss can be stored in a useful and sanitary manner.

It is another object of the invention to provide a packaging system that eliminates the bulk of a conventional dental floss container so that dental floss may be easily carried on one's person.

It is a further object of the invention to provide a packaging system in the form of a bag, which can be repeatedly opened and closed for storing used and unused portions of dental floss.

Still another object of the invention is to provide a packaging system individually sold and distributed on wire dispensers.

It is an object of the invention to provide improved elements and arrangements thereof for the purposes described which is inexpensive, dependable and fully effective in accomplishing its intended purposes.

These and other objects of the present invention will become readily apparent upon further review of the following specification and drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an environmental, perspective view of a packaging system according to the present invention.

Fig. 2 is an exploded view of a packaging system according to the present invention.

Fig. 3 is a sectional view of a packaging system according to the present invention drawn along lines 3-3 of Fig. 1.

Similar reference characters denote corresponding features consistently throughout the attached drawings.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention relates to a packaging system, generally designated as 10 in the drawings. As depicted in Fig. 1, the packaging system 10 includes a thin, flexible bag 12 and a pre-cut portion of dental floss 14 disposed within the bag 12. The bag 12 is relatively small in size, preferably having a width of about 1.5 inches and a length of about 2.0 inches. The bag 12 can be formed from a flexible material, such as paper or plastic. The dental floss 16 is preferably of a length which is determined to be sufficient for only one use.

As can be seen more clearly in Fig. 2, the bag 12 has a front wall 12a and a rear wall 12b. Each of the front and rear walls 12a and 12b are fixedly attached together at opposite longitudinally extending side seams 14 and at a closed lower end



16. A top end 15 of the bag 12 includes an aperture 20 for facilitating display of the packaging system 10 on a wire dispenser, and a slidable sealer 22 for releasably sealing the bag 12. The slidable sealer is preferably a ziplock sealer commonly found in Ziploc® bags. When the bag 12 is unsealed, a mouth 18 is formed by the front and rear walls, 12a and 12b, between the side seams 14.

Referring to Fig. 3, it can be seen that the sealer 22 includes a tongue element 22a on the front wall 12a and a groove element 22b on the rear wall 12b, with both elements 22a and 22b being flexible so the tongue element 22a can slidably engage the groove element 22b in a "zip-locking" type fashion.

It is to be understood that the present invention is not limited to the embodiment described above, but encompasses any and all embodiments within the scope of the following claims.